

Skin Cancer:

Preventing America's Most Common Cancer

2001



“Young people need to know that the risk of getting skin cancer later can be greatly reduced if they start protecting their skin from the sun now.”

*Jeffrey P. Koplan, MD, MPH
Director, Centers for Disease Control and Prevention*

Skin Cancer: A Largely Preventable Cancer

The Burden of Skin Cancer

Skin cancer is the most common form of cancer in the United States. The three major types of skin cancer are the highly curable basal cell and squamous cell carcinomas and the more serious malignant melanoma. The American Cancer Society estimates that a combined total of more than 1 million new cases of basal cell and squamous cell carcinomas and an additional 51,400 new cases of malignant melanoma will be diagnosed in 2001. In 2001 alone, skin cancer will claim the lives of almost 9,800 people.

Although death rates from basal cell and squamous cell carcinomas are low, these cancers can cause considerable damage and disfigurement if they are left untreated. However, when detected and treated early, more than 95% of these carcinomas can be cured.

Malignant melanoma, the most rapidly increasing form of cancer in the United States, causes more than 75% of all deaths from skin cancer. This disease can spread to other organs, most commonly the lungs and liver. Malignant melanoma diagnosed at an early stage can usually be cured, but melanoma diagnosed at a late stage is more likely to spread and cause death.

Who Is at Risk?

Although anyone can get skin cancer, people with certain characteristics are particularly at risk. The risk factors for skin cancer include

- Fair to light skin complexion.
- Family history of skin cancer.
- Personal history of skin cancer.
- Chronic exposure to the sun.
- History of sunburns early in life.
- Atypical moles.
- A large number of moles.
- Freckles (an indicator of sun sensitivity and sun damage).

Preventing Skin Cancer

Exposure to the sun's ultraviolet (UV) rays appears to be the most important factor in the development of skin cancer. Skin cancer is largely preventable when sun protection measures are consistently used. However, approximately 70% of American adults do not protect themselves from the sun's dangerous rays. According to the results of CDC's 1992 National Health Interview Survey,



- Only 30% of adults sought shade.
- Only 28% wore protective clothing when exposed to sunlight.
- Only 32% routinely used sunscreen lotion.

Three-fourths of adults reported that their children (aged 12 and younger) used some form of sun protection, according to the results of a 1997 American Academy of Dermatology household telephone survey. However, specific sun protection measures reported by adults for their children varied:

- 54% of children sought shade.
- 27% wore hats, and 8% wore shirts.
- 53% used sunscreen.

These results highlight the need for educating children and adults about the preventive measures that can be taken to reduce or avoid UV exposure. Research suggests that healthy behavior patterns established in early childhood can influence future behaviors and sometimes set lifetime patterns. Parents, health care providers, schools, and community organizations can play a major role in reinforcing sun protection behaviors (e.g., staying out of direct sunlight or timing outdoor activities for hours when UV light is less intense) and changing attitudes about exposure to the sun (e.g., the opinion that a person looks more attractive with a tan).



“There is good news: skin cancer can be prevented. The challenge, however, lies in changing the attitudes and behaviors that increase a person's risk of developing skin cancer.”

—David Satcher, MD, PhD, Surgeon General

CDC's National Leadership

CDC's skin cancer prevention and education efforts are designed to reduce illness and death and help achieve the *Healthy People 2010* skin cancer prevention goals of increasing to at least 75% the proportion of adults who regularly use at least one protective measure, limit sun exposure, and use sunscreen. With fiscal year 2001 funding of approximately \$1.6 million,* CDC supports the following activities to prevent skin cancer.

Collecting and Applying Vital Information

CDC develops epidemiologic research and monitoring systems to determine national trends in sun protection behaviors and attitudes about sun exposure. Findings are being used to better target and evaluate skin cancer prevention efforts. In addition, detailed information about skin cancer is being collected through the National Health and Nutrition Examination Survey to assess risk factors for skin cancer. Photographs are taken of each participant to identify certain skin conditions, including those related to skin cancer. The photographs are being included in a database that will be used to determine the prevalence of skin cancer and other conditions.

Activities also are under way to help communities sort through the plethora of data on interventions to prevent skin cancer. CDC and other federal agencies provide expertise to the independent Task Force on Community Preventive Services, which is reviewing studies of population-based interventions to prevent skin cancer and is recommending interventions proven to be effective. These recommendations will be widely disseminated and published in the *Guide to Community Preventive Services*. This guide will help communities make the best use of available scientific information as they plan and implement interventions to prevent skin cancer.

Getting the Message Out

CDC's national "Choose Your Cover" media campaign helps states increase people's awareness about skin cancer and its causes as well as influence social norms regarding sun protection and tanned skin—all in an effort to get people to practice sun-safe behaviors. The campaign features TV and radio public service announcements, brochures, posters, and a Web site (www.cdc.gov/chooseyourcover). It targets adolescents, young adults, and parents.

National Council on Skin Cancer Prevention

AMC Cancer Research Center and Foundation
American Academy of Dermatology
American Academy of Family Physicians
American Academy of Pediatrics
American Association for Health Education
American Cancer Society
American College of Obstetricians and Gynecologists
American Optometric Association
American Pharmaceutical Association
American Public Health Association
American School Health Association
Association of State and Territorial Directors of Chronic Disease Programs
Association of State and Territorial Directors of Health Promotion and Public Health Education
Centers for Disease Control and Prevention
Dermatology Nurses' Association
Melanoma Research Foundation
National Association of Physicians for the Environment
National Association of School Nurses, Inc.
National Cancer Institute
National Institute of Arthritis and Musculoskeletal and Skin Diseases
National Medical Association
Skin Cancer Foundation
Skin Cancer Program, California Department of Health Services
U.S. Environmental Protection Agency

Building Critical Partnerships

CDC has convened the National Council on Skin Cancer Prevention, an alliance of organizations that share these goals:

- Increase skin cancer awareness and prevention behaviors in all populations, particularly those at high risk.
- Develop and support partnerships to extend and reinforce core messages for behavior change.
- Coordinate nationwide efforts to reduce skin cancer incidence and deaths.
- Develop a national skin cancer prevention and education plan.

CDC has also convened a Federal Council on Skin Cancer Prevention to promote sun-safe behaviors among federal agency employees, their families, and agency constituents.

* This funding includes salaries and expenses as appropriated in the congressional conference report no. 106-1033.

CDC Support for Skin Cancer Prevention Education Initiatives

CDC currently funds four skin cancer prevention demonstration projects targeting children, parents, and caregivers to reduce illness and death from skin cancer.

- **Pool Cool**, developed by the University of Hawaii with Boston University School of Medicine, is an intervention offered at public swimming sites across the country. Targeting parents, lifeguards, pool managers, and children aged 5–10 years, its goal is to increase their awareness about skin cancer prevention, teach them skills to protect themselves, and influence their intentions and practices regarding sun safety at the pool. The program also aims to increase sun-safe policies at swimming sites—for example, by promoting the use of sunscreen and hats and the availability of portable shading, particularly during swim time. The program has a new partner, the National Parks and Recreation Association, which manages pools. Sun protection habits increased significantly where the Pool Cool program was in place, whereas these habits decreased among visitors to sites where the program was not offered.



- The **Sunwise Stampede** program at San Diego State University is an environmentally based program to promote sun safety among zoo visitors. It targets children and uses animal skin protection as its theme. At the entrance to the San Diego Zoo, visitors receive sun safety tip sheets and



discount coupons for hats and sunscreen.

Inside the zoo, children have

their hands stamped with sun safety reminders, and they can participate in arts and crafts projects that

reinforce sun safety messages. On bus tours and in signs posted throughout the zoo, visitors are reminded about sun safety. Study results suggest that the program was successful in increasing sun safety behaviors directly (hat wearing) and indirectly (hat and sunscreen purchasing).

- **The National Coalition for Skin Cancer Prevention in Health, Physical Education, Recreation, and Youth Sports**, sponsored by the American Association for Health Education, is developing a national action plan for providing education about preventing skin cancer to professionals and volunteers who work with youth sports programs, outdoor school activities, parks and recreation programs, and elementary- and middle-school health education. A skin cancer prevention Web site (www.sunsafety.org) and other channels will be used to disseminate skin cancer prevention messages and materials nationwide. The coalition is also developing an action kit to help member organizations assess their skin cancer prevention programs.

- **The Coalition for Skin Cancer Prevention in Maryland**, coordinated by the Maryland State Medical Society, develops skin cancer prevention education that targets children aged 10–13 years and their parents and caregivers. The coalition's middle-school educational program, SunGuard Your Skin, reached over 15,000 seventh graders in 1999. The coalition's multimedia Web site



(www.sunguardman.org) features *The Adventures of SunGuard Man*, a cartoon with sound effects and narration. A SunGuard Man mascot hands out sunscreen and educational materials at community and sporting events throughout the summer.

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